To: Walter C. Francis and Jeff Kempter
Product Manager #32
Registration Division (TS-767C)

From: Michael Firestone, Chief
Special Review Section #2
Exposure Assessment Branch
Hazard Evaluation Division (TS-769C)

Attached please find the EAB review of...

Reg./File No.: 464-236

Chemical: Sulfuryl Fluoride

Type Product: Fumigant

Product Name: Vikane

Company Name: Dow Chemical Company

Submission Purpose: Review of Exposure Studies

ACTION CODE: 660

Date In: 09/30/87

Date Completed: 11/6/87 2 Days

Deferrals To:

____ Ecological Effects Branch

X Residue Chemistry Branch

____ Toxicology Branch

____ Benefits and Use Division

Monitoring study requested by EAB: /

Monitoring study voluntarily conducted by registrant: /
1.0 INTRODUCTION

Dow Chemical Company has submitted a study for Agency review in response to data requirements specified in the Registration Standard for sulfuryl fluoride (June 1985).

2.0 STUDY REVIEW

The registrant has conducted a study measuring the volatilized residues from a variety of food and nonfood items following fumigation with sulfuryl fluoride in a closed chamber. EAB has briefly examined the study, and concludes that it appears to have satisfied the data requirements set forth in the Registration Standard. A full review of these data by EAB is not warranted, since this Branch did not require the residue studies on food and nonfood items. EAB defers to the Residue Chemistry Branch for the evaluation of these data.

3.0 DISCUSSION AND CONCLUSIONS

Human exposure to sulfuryl fluoride resulting from its use as a residential fumigant cannot be assessed using the data generated from these fixed location chamber studies. As was pointed out at the protocol review stage, EAB did not request these studies and has noted that this type of study is not useful for risk assessment purposes (see attached protocol reviews dated Jan. 22, 1986 and Jan. 16, 1987).

In order for EAB to accurately assess the exposure of humans to sulfuryl fluoride following its use as a structural fumigant, additional data will have to be generated using personal monitoring techniques as specified in the Pesticide Assessment Guidelines, Subdivision U, Applicator Exposure Monitoring.

Laurie Lewis  
Special Review Section  
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Hazard Evaluation Division (TS-769C)